

REMARKS

Claims 1-22 are pending in the instant application. Claims 1-21 presently stand rejected. Claims 1, 8, 15, and 21 are amended herein. Claim 22 is newly presented. Entry of this amendment and reconsideration of the pending claims are respectfully requested.

Claim Rejections – 35 U.S.C. § 102

Claims 1-6, 8-12, and 15-20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Slavenburg et al. (US 5,450,556).

A claim is anticipated only if each and every element of the claim is found in a single reference. M.P.E.P. § 2131 (citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628 (Fed. Cir. 1987)). “The identical invention must be shown in as complete detail as is contained in the claim.” M.P.E.P. § 2131 (citing *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226 (Fed. Cir. 1989)).

Amended independent claim 1 now recites, in pertinent part, “wherein at least one of the plurality of coprocessors is linked in bi-directional communication with the control engine independent of the instruction memory.” Applicants respectfully submit that Slavenburg fails to disclose a coprocessor linked in bi-directional communication with a control engine independent of an instruction memory.

Applicants note that the Examiner has previously cited instruction register 21 and instruction issue pipeline 22 as corresponding to Applicants’ claimed “instruction memory.” In reference to claim 21, the Examiner stated “the control engine (element 15) **indirectly** communicates in a bi-directional manner with each of the coprocessors (elements 11-14). The coprocessors write their results to memory as shown in [figure 1 of Slavenburg] and thus when the control engine reads from this memory location, data is communicated to the control engine from one of the coprocessors on a DATA OUT path. **Conversely, the control unit controls the issuance of the next instruction, which is communicated to the coprocessors for execution on a DATA IN path.**” *Final Office Action* mailed April 1, 2005, page 11, lines 5-11 (emphasis added).

Therefore, the Examiner acknowledges that branch control unit 15 only communicates indirectly with processor functional units 11-14 through instruction issue

pipeline 22 and instruction memory 21. As such, Slavenburg clearly fails to disclose any of processor functional units 11-14 linked in bi-directional communication with branch control unit 15 independent of instruction issue pipeline 22 and instruction memory 21.

Consequently, Slavenburg fails to disclose each and every element of claim 1, as required under M.P.E.P. § 2131. Independent claims 8 and 15 include similar novel elements as independent claim 1. **Additionally, independent claims 8 and 15 further include a coprocessor linked in bidirectional communication with a control engine independent of the instruction memory AND the data memory.** Accordingly, Applicants request that the instant §102 rejections of claims 1, 7, and 15 be withdrawn.

Claim Rejections – 35 U.S.C. § 103

Claims 7 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Slavenburg in view of Examiner's Official Notice. Claims 13 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Slavenburg in view of Hao et al. (US 6,028,844).

"To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. All words in a claim must be considered in judging the patentability of that claim against the prior art." M.P.E.P. § 2143.03.

For the reasons discussed above, Applicants respectfully submit that the combination of Slavenburg, the Examiner's Official Notice, and Hao fails to disclose, teach, or fairly suggest all elements of independent claims 1, 8, and 15, as required under M.P.E.P. § 2143.03.

Dependent claims 2-7, and 9-14, and 16-21 are patentable over the prior art of record for at least the same reasons as discussed above in connection with their respective independent claims, in addition to adding further limitations of their own. Accordingly, Applicants respectfully request that the instant § 102 and § 103 rejections for claims 2-7, and 9-14, and 16-21 be withdrawn.

New Claim 22

Applicants note that new claim 22 recites in pertinent part, "datapaths **directly** coupling the control engine to the one of the plurality of coprocessors." As acknowledged by the Examiner, "the control engine (element 15) **indirectly** communicates in a bi-directional manner with each of the coprocessors (elements 11-14)." *Final Office Action* mailed April 1, 2005, page 11 (emphasis added). Accordingly, claim 22 is novel and nonobvious over Slavenburg.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants believe the applicable rejections have been overcome and all claims remaining in the application are presently in condition for allowance. Accordingly, favorable consideration and a Notice of Allowance are earnestly solicited. The Examiner is invited to telephone the undersigned representative at (206) 292-8600 if the Examiner believes that an interview might be useful for any reason.


CHARGE DEPOSIT ACCOUNT

It is not believed that extensions of time are required beyond those that may otherwise be provided for in documents accompanying this paper. However, if additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a). Any fees required therefore are hereby authorized to be charged to Deposit Account No. 02-2666. Please credit any overpayment to the same deposit account.

Respectfully submitted,

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